

Règlement pour l'obtention du titre de "Généticien forensique SSML"

Reglement über die Verleihung eines Titels "Forensische/r Genetiker/in SGRM "

Guidelines for obtaining the title "Forensic Geneticist SSLM "

#### 1. Introduction

The forensic geneticist is the forensic scientist who uses the tools of molecular biology to provide objective evidence in forensic caseworks and to answer requests from individuals seeking information about their lineage. He (she) possesses sufficient knowledge and experience in the following fields of activity:

- sample characterization (blood, saliva, semen, etc.) through presumptive and confirmatory tests
- application of different methods for the analysis of different forensic material
- expert interpretations and statistical evaluations of single-, as well as mixture DNA-profiles (autosomes, X and Y chromosomes, mitochondrial DNA, etc.) obtained using samples taken from individuals or objects during forensic investigations, paternity testing or identification of deceased persons
- expert opinions for the police and the judicial authorities
- the legal bases concerning trace and parentage investigations
- quality management procedures for example ISO 17025

The head of a forensic DNA laboratory in Switzerland and his deputy must hold the title of forensic geneticist of the SSLM. It certifies that the owner of the title possesses the knowledge detailed in this document as controlled through the examination process described below. This title does not correspond to an education program available at a specific university.

## 2. Education and knowledge requirements

#### 2.1. Education

The candidate must possess the minimum of a Bachelor of Science degree or its equivalent (for example Haute Ecole Spécialisée / Fachhochschule) in a scientific field: forensic science, biology, chemistry, medicine or related areas.

## 2.2. Basic knowledge requirements

Basic knowledge requirements include: general biology, genetics, molecularbiology, statistics and informatics.

# 2.3. Specialised knowledge requirements

Specialised knowledge requirements include: specialised genetics, forensic science, evidence handling, DNA analysis, specialised statistics, trace evidence evaluation, relatedness evaluation, report writing, law, laboratory management.

# 2.4. Experience requirements

The candidate must have a minimum of 5 years of theoretical and practical experience as a forensic examiner/analyst covering all aspects of a forensic DNA laboratory.

The candidate must have taken the full responsibility (analysis and reporting) of at least 75 trace cases and at least 25 paternity cases.

The candidate must fulfill the conditions listed for ordinary membership according to the Statutes Art. 5 (Section 1b and 2-4).

# 2.5. Variety of Experience

During his/her career, the candidate must have accumulated at least three months experience in other laboratories with activities of interest to forensic genetics<sup>1</sup>. This experience may have been accumulated in monthly periods. The 3-month internship can be divided, whereby at least 2 internships must be of at least one month. The remaining internship (one month) can be covered by 2 two-week stays.

## 3. Examination

## 3.1. Registration

The candidates to the title must register by sending a dossier to the evaluation commission. This dossier must contain:

- Curriculum Vitae (with list of publications)
- degrees and certificates
- post-graduate education and training
- details and documentation of experience requested in chapter 2.4 and 2.5
- list of professional activities, detailing participation and responsibilities in forensic investigations, participation as forensic experts in judicial procedures
- attendance at seminars, courses, workshops and professional meetings on forensic DNA analysis and other related scientific fields organised by universities or scientific organisations
- anonymised copies of reports concerning 5 different forensic cases (trace and paternity)
- copy or reprint of 1 pertinent scientific publication, as first author

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<sup>&</sup>lt;sup>1</sup> For example, the police, university institutions or toxicology laboratories.

## 3.2. Practical examination

The practical examination consists of at least 2 real or mock cases presented by the Jury to the candidate, which have to be handled personally by the candidate (1 hour preparation time). The evaluation of the jury is based on a verbal debate of the candidate's findings. This debate may be organized in conjunction with the theoretical examination.

#### 3.3. Theoretical examination

The knowledge requirements of the chapters 2.2 and 2.3 are the object of an oral theoretical examination. Each of the chapters of these requirements have to be examined. The candidate must demonstrate sufficient knowledge to satisfy the Jury on each examined chapter.

Some chapters may be skipped from examination, if the candidate can provide certification, satisfying the jury that he has passed an examination during his graduate or post-graduate education.

Up to 2 hours for each session (practical and theoretical) should be dedicated to the examination.

The examination may be passed on all topics during the same session or during several sessions.

## 3.4. **Jury**

A jury nominated by the president of the Section forensic genetics (hereafter the president) is responsible for the evaluation of the practical and theoretical examination. The jury must be composed of 3 persons with appropriate qualification (a President of the Jury and two experts, one in charge of the protocol). The members of the jury must all be from other institutions as the candidate.

## 3.5. Administration of the examination

The president receives the registration file of the candidates. He or she examines these files and decides which knowledge requirements have still to be examined.

The president is responsible for the organization of the practical and theoretical examination and for the selection of the jury. The jury should be selected to cover as adequately as possible the topics which have to be examined.

The president considers biannually registrations received before the 1st of January respectively the 1st July. He or she organises the examination within six months of these deadlines. He or she communicates details of time and location of the examination to the candidate at least three weeks prior to the practical/oral examination.

The Section forensic genetics is responsible for the updating of the appendix on the knowledge requirements.

## 3.6. Language of the examination.

French, German, Italian or English may be used for the examination and for the official documents.

## 3.7. Marks & threshold for success

The jury evaluates the theoretical and practical examination and determines a "passed" or "failed" qualification. The Jury presents a complete report of the candidate's practical and theoretical knowledge to the president, which is retained on file. In case of a failed examination, the candidate receives a summary of the main weaknesses as determined by the jury.

# 3.8. Recourse & repetition of a failed examination

The candidate may appeal to the President of the Section of Forensic Genetics of the Swiss Society of Legal Medicine. In the case the president is a part of the jury, the appeal may be passed to the president of the Swiss Society of Legal Medicine. The deadline for this is 30 days from the date of the examination.

The candidate may repeat two times the failed examination (practical and/or theoretical).

Approved at: 3000 Bern | Date: 24th of November 2021 | Section Forensic Genetic of the Swiss Society of Legal Medicine